

(Demo) Annual Narrative



FWSANV-0170

QUARTERLY
REPORT OF ACTIVITIES
NOV. 1, 1939, TO JAN. 31, 1940
MALHEUR MIGRATORY WATERFOWL REFUGE

United States Department of the Interior
Bureau of Biological Survey
Burns, Oregon

THE INTERIOR
UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY

OFFICE OF REGIONAL DIRECTOR
404 U. S. COURTHOUSE, PORTLAND, OREGON

REGION No. 1
WASHINGTON
OREGON
CALIFORNIA
NEVADA

February 12, 1940

Chief, Bureau of Biological Survey,
Department of the Interior,
Washington, D. C.

Attention: Mr. Salyer



Dear Sir:

We are enclosing herewith report of Malheur Refuge covering period of November 1, 1939, to January 31, 1940.

We believe Mr. Scharff should be commended for this excellent report and for the work done during the past three months' period.

Very truly yours,

T. B. Murray
Acting Regional Director

TBM:vb
c - Mr. Scharff ✓

S - Publications
Quarterly Report

Malheur Refuge
Burns, Oregon
February 8, 1940

Acting Regional Director
404 U. S. Courthouse
Portland, Oregon

Dear Mr. Murray:

Attached hereto please find the Malheur Refuge Report of Activities and the Quarterly Grain Report, covering the period November 1, 1939, to January 31, 1940.

If these reports are correct and meet with your approval, please initial and forward the required copies to the Washington office.

Very truly yours,

J. C. Scharff
Refuge Manager

fac
Encls.

cc: Attached

WEATHER CONDITIONS

Old Jupe Pluvius presented some interesting weather phenomena at the Malheur Refuge during the November, 1939 - January, 1940, quarter. Apparently He commenced with the avowed purpose of giving this section an arid winter, since the month of November, according to the recordings at the Sod House weather station, was not only the driest November on record but was also the driest of any month since August, 1937, which also showed merely a trace of precipitation. No doubt imbued with the Christmas spirit, He had a change of heart on December 9 and began to unload a bountiful supply of moisture with the result that December's precipitation was more than twice that of a year ago and January, with its 1.91 inches of precipitation surpassed any previous month since weather recordings were initiated at Sod House in July, 1937.

Sod House Weather Bureau Station

Weather Data--Nov., Dec., 1939, and Jan., 1940--Summary

Month	: Total Inches :		
	: Precipitation :		: Maximum
	: During Month	: Temperature	: Minimum
November	Trace	64	10
December	1.57	65	4
January	1.91	50	10
Total Precipitation	3.48		
Maximum Temperature		65	
Minimum Temperature			4

As noted above the temperature has been relatively mild which, although welcome from the standpoint of comfort, has not been conducive toward the establishment of a desirable snow reserve on the higher elevations. The precipitation for this period brought 9 inches of snow but it did not remain on the ground for any appreciable length of time. On February 1, 1940 the Blitzen Valley and the greater portion of the Steens Mountains are barren of snow except for scattered patches on north slopes and other sheltered areas.

The season has not sufficiently advanced to presage water conditions for the summer months. February and March are ordinarily good precipitation months and, if they carry on the trend instigated by the past two months, we may experience one of our best seasons. However, this is merely a conjecture and no reliable forecast can be made until the annual Steens Mountains snow measurements are taken the latter part of March.

THE WATERFOWL SITUATION

Migrations, principally because of underlying weather conditions, are characterized by either a rapid southward movement of the entire population or by a gradual day-to-day movement which seems to make no immediate, appreciable decrease in numbers. The latter condition was prevalent during the 1939 fall migration when the birds moved out gradually and mostly at night.

Although many of the birds had migrated, thousands of waterfowl were still in evidence throughout the month of November. A summation of field observations during the month revealed 12,000 whistling swan, 15,000 to 20,000 Canada geese, 14,000 snow geese, 60,000 to 75,000 ducks (all species), 200 cackling geese, and limited numbers of curlew, avocets, glossy ibis, sandpipers, dowitchers, godwits, black-necked stilts, yellow-legs, night herons, blue herons, sandhill cranes, egrets, pelicans and many insectivorous birds.

Early December found practically the same number of swan, Canada geese and ducks but a marked decrease in most of the other species. The first snow and coldest weather of the period, occurring just prior to Christmas, seemed to induce the remaining birds, with the exception of those destined to stay all winter, to hie themselves toward Mexico.

The annual waterfowl census conducted January 15, 16 and 17 revealed the following wintering population on Malheur Refuge and vicinity: 1,700 mallards, 400 gadwalls, 1,050 baldpates, 200 green-winged teal, 50 pintails, 100 lesser scaup, 25 goldeneyes, 25 ruddy ducks, 7,000 Canada geese, 200 whistling swan and 450 coots. Although the total birds counted closely approximate that of a year ago, there are some appreciable differences in the ratio of species. There was approximately a 40% increase in numbers of Canada geese and a 40% decrease in ducks of all species. A marked decrease was noted in numbers of mallards and pintails and a marked increase in numbers of baldpates, gadwalls, lesser scaup and whistling swan. The other species either showed no variation or were not present in sufficient numbers to arrive at a comparison.

A few egrets, which evidently found nothing objectionable in weather conditions or in the quality and abundance of food, were on this locality until late December. It is rather unusual to see these birds on the Refuge at this late date.

Approximately 300 baldpates invaded the lawn at Refuge headquarters for their Christmas dinner and have been frequent callers since that time. These visits have no doubt been prompted partly by the frozen condition of much of the water areas and partly by the green, tender grass to be found on the lawn.

CHRISTMAS BIRD CENSUS

This year the Malheur Refuge was selected by the National Association of Audubon Societies as one of the participants in Bird-Lore's Fortieth Annual Christmas Bird Census. The census was taken on December 19 between the hours of 8:10 A.M. and 4:45 P.M. and the area covered was in the Blitzen Valley from Buena Vista to the P Ranch dam. A total of 53 species and 3297 individuals was recorded, as follows:

Eared Grebe	1	Sage Hen	2
Great Blue Heron	8	Ring-necked Pheasant	131
Whistling Swan	6	American Coot	25
Common Canada Goose	1564	Killdeer Plover	5
Cackling Goose	52	Wilson's Snipe	6
White-fronted Goose	31	Great Horned Owl	40
Lesser Snow Goose	1	American Long-eared Owl	1
Mallard Duck	323	Short-eared Owl	6
Gadwall	3	Western Belted Kingfisher	2
Baldpate	37	Red-shafted Flicker	9
American Pintail	93	Hairy Woodpecker	2
Green-winged Teal	205	Batchelder's Woodpecker	1
Shoveller	10	American Magpie	92
Wood Duck	1	Western American Raven	41
Redhead Duck	3	Western Crow	3
Lesser Scaup Duck	11	Long-tailed Chickadee	22
American Goldeneye	2	American Dipper	2
Ruddy Duck	232	Western Marsh Wren	11
American Merganser	4	Western Robin	17
Cooper's Hawk	2	Townsend's Solitaire	3
Western Red-tailed Hawk	14	Ruby-crowned Kinglet	3
Am. Rough-legged Hawk	34	California Shrike	2
Ferruginous Rough-leg	2	English Sparrow	52
Golden Eagle	4	Brewer's Blackbird	33
Marsh Hawk	61	Shufeldt's Junco	13
Prairie Falcon	3	Modoc Song Sparrow	65
Duck Hawk	1		

The most interesting observation made during the census was that the great horned owls were apparently "rushing the season". Practically all owls were seen in mated pairs, a relationship usually not in evidence until the latter part of January or February.

UPLAND GAME BIRDS

On November 25 the Oregon State Game Commission released 85 Mongolian pheasant cocks at strategic points on the Malheur Refuge. We are indeed fortunate in receiving this number of the Mongolians since they are hardier than the average ring-necked pheasant and should materially bolster our resident breeding stock.

As noted previously, 131 of the ring-necked pheasants were counted on our Christmas bird census. A number of them can be seen at any of the feeding stations at all times of day and their clarion calls are heard frequently in the P Ranch area.

It is our desire to rehabilitate the California quail which once frequented the Blitzen Valley but were practically annihilated by the severe winter of 1936-37. We believe that with the feeding station-shelter system which has been inaugurated these birds will be able to survive any future winters in excellent shape. Permission has been received from the State Game Commission for the propagation of these birds, arrangements have been made for their trapping by a rancher at Dayville, Oregon, and we are now awaiting authority from the Washington office to proceed with the work.

MULE DEER

On January 10 a trip was made by horseback into the Steens Mountains to make an analysis of the wintering herd of deer as to sex ratio, antler class of bucks and fawn crop. However, even at elevations of 7000 feet the deer were so scattered that any attempt at further study along this line was infeasible. The mild weather and insufficient snow in the higher elevations has caused no appreciable yarding or concentration of the animals at the lower elevations.

Of the 20 deer seen, 3 were bucks, 10 does and 7 fawn. Two of the bucks were four-pointers, the third being a three-point. All animals were in fine condition and are evidently making good use of the stands of mountain mahogany at the higher elevations while they can.

A number of deer are regular boarders at the P Ranch. They come into the orchard every day for a feed of grain and a little salt. These graceful animals present a thrilling spectacle and add just the necessary complement to a picturesque landscape.



A three-point and a forked-horn buck
in the P Ranch orchard



This split-eared doe has been a yearlong resident of the P Ranch
since its inclusion in the Malheur Refuge

PREDATOR AND RODENT CONTROL

Since the winter season is the period when predator control is at its lowest ebb, the Division of Predator and Rodent Control hunter is taking an extended and well-deserved vacation. However, during November and until December 23, when he entered on leave, the following predators were accounted for:

<u>Month</u>	<u>Coyotes</u>	<u>Bobcats</u>
November	29	2
December	<u>18</u>	<u>2</u>
TOTALS	47	4

It has been noted that a few deer are being injured or killed by some predator or predators in the Blitzen Valley. It was thought at first that this might be the work of a cougar but a careful reconnaissance of the area has led us to believe that the depredations are being caused by coyotes. Apparently the deer are driven on to the ice where they are helpless and at the mercy of their attackers.

One fact which was clearly brought out by observations of winter bird populations was the excessive number of magpies and ravens prevalent on the Refuge. These predacious birds have increased in such numbers during the past year that it is evident some extensive control work must be undertaken in the immediate future to prevent an enormous destruction of nests and loss of young waterfowl. It is our desire to carry on a controlled poison campaign against these birds during the present winter when such tactics are most successful and we are merely awaiting the "go" signal from Washington to commence the work.

While the protection of the porcupine might be meritorious in some sections of the country, we feel that it must be controlled on the Malheur if we are to be successful in the growing of trees and shrubs. Their numbers are rapidly increasing and signs of their depredations on plant life are apparent in all sections of the Refuge.

MUSKRAT TRAPPING

During early December authority was received for trapping with Refuge personnel not to exceed 1000 muskrats from the dike east of the Buena Vista headquarters and the dike through Diamond Swamp. The rats in these areas have built up to such numbers that there is grave possibility of damage to the dikes.

Because of the frozen condition of the areas the trapping thus far has not been too successful, but with the advent of warmer weather it should be possible to remove the rats in a very short time. As of February 1, 44 rats and 6 mink have been taken.

No effort whatsoever has been made to trap mink and all that have been taken were caught in muskrat sets. The trapping operations have brought out the undeniable fact that the Refuge mink population is much greater than was apparent from casual observations. A few cases have been disclosed where the trapped muskrats have been eaten, which is undoubtedly the work of mink, and a muskrat colony near the P Ranch has apparently been annihilated by this animal.

A mink population as extensive as this will be a serious menace to nesting birds and permission has been requested to remove a limited number of these valuable fur bearers from the Refuge.

BIRD BANDING

Because of the mildness of the season and the reluctance of many birds to depart for the South, it was possible to carry on fall banding operations until late December, much later than is ordinarily the custom.

The mild weather, causing very little movement in the birds, was not conducive to good banding, however, and the daily number of birds captured was usually below normal. During the period June 2, 1939, to January 11, 1940, a total of 5029 birds, representing 19 species, was banded.

Some experimental work in capturing adult Canada geese for banding was carried on in January and we were successful in getting the aluminum bands on 22 individuals. A wire door approximately six feet high by ten feet wide and hinged at the top was placed on one wing of the Buena Vista trap. The supports holding the door up were so constructed that they could be released by a trigger which in turn was manually operated from a wire extending to a place of concealment approximately 300 yards ^{from} the trap. The geese wander inside to feed after which the door is tripped and they are imprisoned.

Prior to their release, as an identification experiment, the wings of a number of the geese were bleached by dipping them in a Chlorax solution. With such marking they should be readily identified in flight.



Canada geese in the Buena Vista banding trap



It is not very often that these wary birds
can be inveigled into a trap

PHYSICAL DEVELOPMENTS

November and the early part of December furnished ideal weather for CCC development work but the inclement weather experienced during the balance of the period made work of this sort very difficult. However, much was accomplished during the period and many completions of the seemingly limitless number of projects can be recorded:

<u>Class.</u>	<u>Type of Development</u>	<u>Quantity</u>
104	Bridges, Vehicle	1 Ea.
131	Fences	1701 rds.
133	Levees, Dikes and Jetties	26,365 cu.yds.
139	Sewage & Waste Disposal Systems	1 Ea.
156	Tool Boxes	6 Ea.
157	Misc. Structural Improvements	1 Ea.
202	Truck Trail Construction	2 miles
202	Truck Trail Maintenance	62.8 miles
316	Crushing Stone	122 tons
401	Clearing & Cleaning Channels	14,506 sq.yds.
404	Excavation Earth	37,175 cu.yds.
407	Rock Riprap	30 sq.yds.
411	Water Control Structures	8 Ea.
703	General Cleanup	4.5 acres
713	Razing Undesirable Structures	923 man-days
902	Food and Cover Planting	18 acres
906	Other Wildlife Activities	8 man-days
1012	Prep. and Transportation Materials	1268 man-days
1023	Surveys	166 man-days
1026	Equipment Repair & Construction	1222 man-days
1028	Warehousing	1001 man-days

This period saw the completion, with the exception of the radial gate installations, of the Busse Dam. This is an exceptionally fine piece of work and would be a credit to any engineering contractor. The dam has been temporarily fitted with stop logs pending allocation of funds for the purchase of gates. This dam and the Stubblefield ditch control gate, which was also completed during the period, are essential for all water developments in Unit 10.

THE 1939 HUNTING SEASON

The 1939 duck hunting season proved rather unsuccessful to most of the nimrods in this particular section, which can be attributed primarily to weather conditions. The pleasant weather caused very little movement in the waterfowl and many of the southward flights occurred at night. We were accused by several of the local sportsmen of training our honkers to read boundary markers because very few of the many thousands of geese on the Refuge ventured "out of bounds" during the hunting season.

An extensive patrol was maintained for possible game law violations during the hunting season and one arrest was made. On November 12 a party of five men apprehended in shooting a rifle from a car while traveling through the Refuge stated, upon being questioned, that one of their party had shot at a coyote, which of course could not be proven since no evidence was available.

A signed statement was received from Teddy Teeman, an Indian of Burns, Oregon, who did the shooting, and a receipt was obtained for his gun. A complete report of the circumstances was forwarded the U. S. Game Management Agent and a reprimand was sent Mr. Teeman warning him to observe Federal and State Laws and Regulations with respect to hunting and that he desist in hunting on the Malheur Migratory Waterfowl Refuge.

GRAIN COLLECTION AND DISTRIBUTION

During the period, 140 bushels of barley and 240 bushels of wheat were transferred to the Sacramento Refuge, California, 25 bushels of wheat were transferred to the Turnbull Refuge, Washington, and 60 bushels of oats were transferred to the Desert Game Range, Nevada.

Nine bushels of corn were purchased locally and 6 bushels were fed to the trumpeter swan and ducks in the pen at Refuge headquarters.

Sixty bushels of barley and 120 bushels of wheat were fed in the banding trap and during the cold weather periods to the waterfowl on the Sod House Spring. Sixty bushels of oats were fed to the government-owned horses on the Refuge.

GRAZING

As of January 31 there were 5,005 head of cattle and horses under special use permit on the Blitzen Valley unit of the Malheur Refuge. The number of permitted stock has been maintained at approximately this number since the advent of the grazing season on September 1 and it is not contemplated that there will be any great reduction prior to the expiration of the season.

The forage is holding out exceptionally well and for this reason a number of the permittees whose permits have expired have requested extensions to March 31. Much of the residue of the unused forage of a year ago has been utilized, which will prevent the choking out of new growth and materially reduce the fire hazard of the forthcoming summer season.



A herd of white-faced weaners under grazing permit
on the Malheur Refuge.



Cattle grazing January 30 in Critchlow Field
(Note abundance of remaining forage)